

ABSTRAK

SRI RAHAYU KALAKA. 2021. *Kajian Pengembangan Kemasan Kompleks Edible Film Gelatin-Kitosan-Jahe Pada Permen Soba Rumput Laut *Kappaphycus alvarezii**. Program Studi Ilmu Kelautan. Pembimbing 1: Dr. Asri Silvana Naiu, S.Pi.,M.Si. Pembimbing II: Dr. Rahim Husain, S.Pi.,M.Si

Tujuan penelitian ini untuk mengkaji mutu permen soba rumput laut *Kappaphycus alvarezii* terkemas kertas minyak dan *edible film* yang berbasis gelatin kompleks selama penyimpanan. Perlakuan pada penelitian ini terdiri atas kemasan yang berbeda yaitu kertas minyak dan *edible film* dengan lama penyimpanan 0, 7, 14, 21, 28 hari yang dilakukan dengan 2 ulangan. Parameter yang diuji meliputi karakteristik *edible film* gelatin-kitosan-jahe, karakteristik mutu permen yang meliputi pengujian organoleptik hedonik (kenampakan, rasa, aroma dan tekstur), kadar air, abu, ALT dan kapang. Penelitian dirancang menggunakan metode Rancangan Acak lengkap (RAL) Faktorial dengan uji lanjut BNT. Hasil penelitian menunjukkan bahwa karakteristik *edible film* memiliki kriteria rasa agak suka hingga suka; tekstur agak suka hingga suka; aroma agak suka; ketebalan 0,0202mm-0,0293mm dan kelarutan 29,10%-39,90%. Kemasan yang berbeda, lama penyimpanan dan interaksi antar ke-2 perlakuan berpengaruh nyata pada mutu permen soba rumput laut. Permen soba yang dikemas dengan *edible film* berbasis gelatin dengan penambahan kitosan dan jahe dapat mempertahankan mutu organoleptik hingga 28 hari sedangkan yang dikemas dengan kertas minyak hanya mampu mempertahankan mutu organoleptik hingga 7 hari. Hasil pengujian kadar air dan mikrobiologi (ALT dan kapang) pada permen soba ke-2 perlakuan hingga penyimpanan 28 hari masih memenuhi SNI kembang gula lunak (SNI 3547-2-2008), kecuali kadar abu. *Edible film* gelatin, kitosan dan jahe dapat dikembangkan sebagai kemasan permen soba rumput laut mengingat fungsinya yang dapat memperpanjang masa simpan berdasarkan nilai organoleptik hingga 21 hari.

Kata kunci : Edible film gelatin, Kertas Minyak, Permen Soba

ABSTRACT

SRI RAHAYU KALAKA. 2021. *Study of Development of Gelatin-Chitosan-Ginger Edible Film Complex Packaging on Seaweed (*Kappaphycus alvarezii*) Buckwheat Candy.* Study Program of Marine Science. The Principal Supervisor is Dr. Asri Silvana Naiu, S.Pi., M.Si., and the Co-supervisor is Dr. Rahim Husain, S.Pi., M.Si.

This study aims to study the quality of seaweed buckwheat candy packaged in glassine and edible film based on complex gelatin during storage. The treatments in this study consist of different packaging, including glassine and edible film with storage times of 0, 7, 14, 21, and 28 days with 2 replications. The parameters tested include the characteristics of the gelatin-chitosan-ginger edible film and the quality characteristics of the candy, including hedonic organoleptic testing (appearance, taste, aroma, and texture), water content, ash, ALT, and mold. This study used a factorial completely randomized design (CRD) followed by an advanced BNT test. The finding shows that the characteristics of edible film for taste are from somewhat like to like; texture is from somewhat like to like; aroma is somewhat like; thickness is from 0.0202mm to 0.0293mm, and solubility is from 29.10% to 39.90%. Different packaging, storage time, and interaction between the two treatments significantly affect the quality of seaweed buckwheat candy. Buckwheat candy packed with an edible film based on gelatin with the addition of chitosan and ginger can maintain organoleptic quality for up to 28 days, while those packaged with glassine can only maintain organoleptic quality for up to 7 days. The result of testing water content and microbiology (ALT and mold) on buckwheat candy in both treatments which up to 28 days of storage still meet the SNI for soft candy (SNI 3547-2-2008), but the ash content. The gelatin-chitosan-ginger edible film can be developed as packaging for seaweed buckwheat candy because it can extend the shelf life based on organoleptic values up to 21 days.

Keywords: Gelatin Edible Film, Glassine, Buckwheat Candy

